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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/726,852	12/02/2003	Takanori Yano	6453P018	5584

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EXAMINER	
GE, YUZHEN	

ART UNIT	PAPER NUMBER
2624	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/726,852	YANO ET AL.	
	Examiner	Art Unit	
	YUZHEN GE	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 May 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,9 and 20-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3, 9 and 20-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☒ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/1/2008 has been entered.

Examiner's Remark

Applicant's amendment, filed on 5/1/2008, has been received and entered into the file. Claims 1-3, 9 and 20-30 are pending. The objection to title, the 112 1st rejections of claims 1-3, 9 and 20-30, and the 112 2nd rejections of claims 2, 9, 24 an 29 have been overcome in view of applicant's amendments/remarks and are hereby withdrawn.

Applicant's arguments with respect to claims 1-3, 20-23, 25-28 and 30 have been considered but are moot in view of the new ground(s) of rejection in view of Fukuhara et al (US Patent Pub. 2002/002**1843**).

Upon further consideration, a new ground of 112 2nd paragraph rejection of claims 9, 24 and 29 is advanced. Based on the interpretation of the examiner, these claims cannot be rejected over the prior art.

DETAILED ACTION

Claim Rejections - 35 USC § 112

2. Claims 1-3, 9 and 20-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 20 and 26 recite the limitation "the selected first code data set" in claim 1. There is insufficient antecedent basis for this limitation in the claim. The examiner will interpret it as "a selected first code data sets" for examination purposes.

Claims 9, 24, and 29 recite "each of frames". It is not clear what frames they are. Are they frames of the first code data sets or the second code data? The examiner suggests connecting the steps of claims 1, 21 and 29 respectively in claims 9, 24 and 20 to clarify "each of frames". The examiner will interpret it as "each of the frames of the second coded data in conformity with Motion JPEG 2000" for examination purposes.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-3, 20-23, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukuhara et al (US Patent Pub. No.: US 2001/002**1843** A1) in view of Fukuhara et al II (US Patent Pub. 2001/0028404).

Regarding claim 1 (interpreted), Fukuhara et al teach an image processing apparatus, comprising:

a compressing unit (1 in Fig. 4, paragraphs [0047]-[0048]) to compress and encode image data of a static image in accordance with a JPEG 2000 algorithm and generate first code data sets (JPEG 2000 images are first code data sets and one JPEG 2000 image is one of the first code data set, Fig. 2A, 101 in Fig. 4, paragraph [0048])

a storing unit to store the first code data sets that are compressed by the compressing unit (Fig. 2A, paragraphs [0046] and [0055]); and

a code sequence converting unit to convert the first code data sets being stored by the storing unit into second code data in conformity with Motion JPEG 2000 (Fig. 4, paragraph [0046], [0051]-[0052], Fig. 6);

wherein the code sequence converting unit comprises:

a dividing unit to divide each of the first code data sets into a header portion and a code portion (Figs. 2A and 3-5);

a header processing unit to provide a tile index for each of the tile part headers including the new tile part header (Figs. 2A-2B and 4, inherent from JPEG 2000 standard that a tile index for each of the tile part headers of an image including a new tile part header is provided, Section A.4.2 of ISO/IEC FCD15444-1:2000, JPEG 2000 Part I Final Committee Draft Version 1.0, Pages 22-23, for example, Isot is the tile index, all tile part header has a tile index; as shown in Fig. 2A and 2B, paragraph [0066] Motion JPEG-2000 standard also provides a new tile index for each of the tile part headers including the new tile part header because Motion JPEG-2000 uses JP2 tile-part header and thus the tile index).

a synthesizing unit to synthesize data processed by the header processing unit and the code portions to be the second code data in conformity with Motion JPEG 2000 (Figs. 2A-2B and 4-6, paragraphs [0046] and [0051]-[0052]).

However they do not explicitly teach a header processing unit to generate a new tile part header for a selected first code data set although the tile part header in the MJ2 file of Fukuhara et al can be regarded as new tile part header because it is in a file that is newly created (Figs. 4-

6, especially 6 in Fig. 4 and paragraphs [0046] and [0052], when MJ2 file 111 in Fig. 4 is generated, new tile part headers for the MJ2 file is generated, the tile header in Fig. 2B is new because it is part of MJ2 file that is newly generated, Also see Fig. 2A, a JP2 header is generated for each image compressed in JP2 format). In the same field of endeavor, Fukuhara et al II teaches a header processing unit to generate a new tile part header for a selected first code data set (paragraphs [0049], [0051], and [0054]-[0056], the tile-part COD marker segment is changed and therefore the tile-part header is newly generated). It is desirable to have optimum encoding control from one tile to another to improve overall picture quality (paragraph [0050] of Fukuhara et al II). Therefore it would have been obvious to one of ordinary skill in the art, at the time of invention, to use the method of Fukuhara et al II to generate a new tile part header for a selected first code data set so that optimum encoding control is achieved for each tile.

Regarding claim 2, Fukuhara et al and Fukuhara et al II teach the image processing apparatus as claimed in claim 1. Fukuhara et al further teach wherein the synthesizing unit synthesizes the first code data sets (101 in Fig. 4, Fig. 5, JP2 images) into a single data sequence of the second code data (111 in Fig. 4, MJ2 file) where images aligning a plurality of static images (moving images aligning a plurality of static images) are compressed and encoded (Fig. 4-6, paragraphs [0017], [0020], [0046] and [0052], Figs. 2A-2B)

Regarding claim 3, Fukuhara et al and Fukuhara et al II teach the image processing apparatus as claimed in claim 1. Fukuhara et al further teach the apparatus comprising:

a decompressing unit to decompress the first code data sets and the second code data (Fig. 1); and

a displaying unit to display the frames showing image data in chronological order at a display unit after the first code data sets and the second code data are decompressed (paragraphs [0013], [0020], [0036], [0066], [0038], and [0042], the decoded image will be outputted using the synchronizing information from the meta-data which implies displaying the frames showing image data in chronological order, the use of word "moving picture" also implies that the frames are shown in chronological order, also it is well known in the art that MPEG and digital video that frames are shown in chronological order, paragraph [0006] of Fukuhara et al II).

Regarding claim 20, Fukuhara et al and Fukuhara et al II teach the image processing apparatus of claim 1. Fukuhara et al further teach the apparatus comprising:

an image pickup device (camera) to image the static images, wherein the compressing unit compresses and encodes image data generated from the image pickup device (paragraphs [0008]-[0009] and [0067]);

a decompressing circuit to decompress and decode the code data of the first code data or the second code data (Fig. 1, paragraph [0011]-[0013], [0021])

Claims 21-23 and 25 are the corresponding method claims of claims 1-3 and 20. Fukuhara et al teach a method (abstract, paragraphs [0014]-[0019]). Thus Fukuhara et al and Fukuhara et al II teach claims 21-23 and 25 as evidently explained in the above-cited passages.

5. Claims 26-28 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukuhara et al (US Patent Pub. No.: US 2001/002**1843** A1) and Fukuhara et al II (US Patent Pub. 2001/0028404), further in view of Pearlman et al (US patent 5,764,807).

Claims 26-28 and 30 are the corresponding computer readable medium claims of claims 21-23 and 25. Fukuhara et al in view of Fukuhara et al II, as discussed above, teaches the corresponding method claims of claims 21-23, and 25. However, Fukuhara et al in view of Fukuhara et al II do not explicitly teach a computer readable medium as recited in the claims.

Pearlman teaches a computer program product comprising a computer readable medium and a computer program (col. 2, lines 47-53).

It is desirable to make a processing method portable from a computer to another computer. It would have been obvious to one of ordinary skill in the art, at the time of the invention, to store the processing steps of the method taught by Fukuhara et al in view of Fukuhara et al II in a computer readable medium taught by Pearlman, because the combination makes the processing method portable and therefore increase its application.

Examiner's Comment

6. Claims 9, 24 and 29 cannot be rejected over the prior based on the interpretation by the examiner. The prior art fails to teach the listed claims each of which specifically comprises the following listed feature(s) in combination with other limitations in the respective claims:

-- an apparatus comprises **an accepting unit accepts a request of an integration degree from a user; and a unit determines a number of the static images to form each of the frames of the second code data in conformity with Motion JPEG 2000 based on the**

integration degree accepted by the accepting unit and a code sequence converting unit to convert the first code data being stored by the storing unit into second code data in conformity with Motion JPEG 2000, wherein the code sequence converting unit comprises: a header processing unit to generate a new tile part header; a synthesizing unit to synthesize data processed by the header processing unit and the code portions to be the second code data in conformity with Motion JPEG 2000.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yuzhen Ge whose telephone number is 571-272 7636. The examiner can normally be reached on 7:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on 571-272-7453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Yuzhen Ge
Examiner
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